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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/678,629	10/03/2003	Kevin I. Bertness	C382.12-0140	9423	
75	590 12/01/2004		EXAMINER		
Alan G. Rego			NGUYEN, VINCENT Q		
Westman, Chan	nplin & Kelly				
Suite 1600	•	ART UNIT	PAPER NUMBER		
900 Second Ave	enue South	2858			
Minneapolis, M	IN 55402-3319	DATE MAILED: 12/01/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)			
Office Action Summary		10/678,629		BERTNESS ET AL.			
		Examiner		Art Unit	,		
		Vincent Q N	• •	2858			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)□	Responsive to communication(s) filed on	<u>_</u> .					
2a)□	This action is FINAL . 2b)⊠ This action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ☐ Claim(s) 1-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4,9-19 and 24-31 is/are rejected. 7) ☐ Claim(s) 5-8 and 20-23 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)□	The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 01/08/2004.	. •	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te	O-152)		

Office Action Summary

DETAILED ACTION

Information Disclosure Statement

Please submit the date (Month and year) for the documents listed under Other Art pages 14 and 15.

Please submit the month for the PCT search report listed under the Other Art page 16-17.

Objection

1. Claim 14, should the "Kevin connector" be "Kevin connection"?

Appropriate correction is required. For the purpose of examination, examiner assumes the claim is intended to recite Kevin connection.

Claim 15 fails to further limit the limitation of claim 1.

For the purpose of examination, the examiner assumes that the claim intended to recite the electronic battery tester of claim 1 further comprise a charger, which is included in every battery tester includes the prior art of Alber et al.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 9-12, 15-17, 24-27, 29-31, are rejected under 35 U.S.C. 102(b) as being anticipated by Alber et al. (4,707,795).

Regarding claims 1, 15, 16, 29, Alber et al. discloses an electronic battery tester comprising (Figure 1) a positive terminal connector (End of cable 21) coupled to the positive terminal of the battery; a negative connector coupled to the negative terminal of the battery (23) (Alber et al. does not specific the positive and the negative, cable 21 must connect to the positive and negative to form a close circuit to test the batteries 23); a temperature sensor configured to measure a temperature of an individual electrochemical cell of the plurality electrochemical cells of the battery (column 7, lines 66-67); and processing circuitry (figure 2), coupled to the temperature sensor, configured to test the battery using the first and second connectors and to provide an output related to the temperature measured by the temperature sensor (figure 2).

Regarding claims 2, 17, Alber et al. discloses the temperature sensor (Thermal fuse) (Column 7, lines 37-38) is a non-contact temperature sensor (Which is non-contact to the user).

Regarding claims 9, 24, Alber discloses the temperature sensor is a contact-type temperature sensor (The sensor is contacted to any elements in the circuit, thus is a contact-type temperature sensor).

Regarding claims 10, 25, Alber discloses a thermocouple (The thermal fuse is thermocouple since heat is coupled to the fuse to sense).

Regarding claims 11, 26, Alber discloses a resistance temperature detector sensor (Thermal fuse is resistance temperature sensor since thermal fuse is a resistance).

Regarding claims 12, 27, Alber discloses a solid state sensor (Thermal fuse is solid, it comprises a solid state).

Regarding claims 30, 31, anything discloses in Alber et al. include the temperature sensor is "moveable".

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 3, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alber et al. (4,707,795) in view of Bertness (6,172,505).

Regarding claims 3, 18, Alber et al. does not disclose an infrared temperature sensor.

Bertness discloses a system similar to that of Alber et al. and further discloses (Figure 1) an infrared temperature sensor (250) for the purpose of providing temperature input to the microprocessor (40) (Bertness's column 8, lines 30-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the infrared temperature sensor as taught by Bertness into the

system of Alber et al. because using the infrared temperature sensor to provide testing parameters of a battery is routine in the art of testing the battery.

6. Claims 4, 13, 14, 19, 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Alber et al. (4,707,795) in view of Champlin (6,137,269).

Regarding claims 4, 19, Alber et al. does not disclose the processing circuitry configured to provide a condition of the electrochemical cell of the plurality electrochemical cells based on the temperature measured by the temperature sensor.

Champlin discloses a system similar to that of Alber et al. and further discloses (Figure 1) the processing circuitry configured to provide a condition of the electrochemical cell of the plurality electrochemical cells based on the temperature measured by the temperature sensor for the purpose of measuring the parameters to test the battery (Champlin's column 1, lines 31-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the processing circuitry configured to provide a condition of the electrochemical cell of the plurality electrochemical cells based on the temperature measured by the temperature sensor as taught by Champlin into the system of Alber et al. because it would have been desirable to provide a condition of the electrochemical to enhance the testing (Champlin's column 1, lines 31-43).

Regarding claims 13, 28, Alber et al. does not disclose a thermistor.

Champlin discloses a system similar to that of Alber et al. and further discloses a thermistor (Champlin's column 8, line 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the thermistor as taught by Champlin into the system of Alber for the same reason as set forth in claim 4 above.

Regarding claim 14, Alber et al. does not disclose the connection is Kevin connection.

Champlin discloses a system similar to that of Alber et al. and further disclose the connection is Kevin connection (Figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Kevin connection as taught by Champlin into the system of Alber et al. because Kevin connection is a routine to test the battery.

Allowable Subject Matter

7. Claims 5-8, and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

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supervisor, N. Le can be reached on (571) 272-2233. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Q. Nguyen Primary Examiner Art Unit 2858

November 28, 2004